

Figure 1

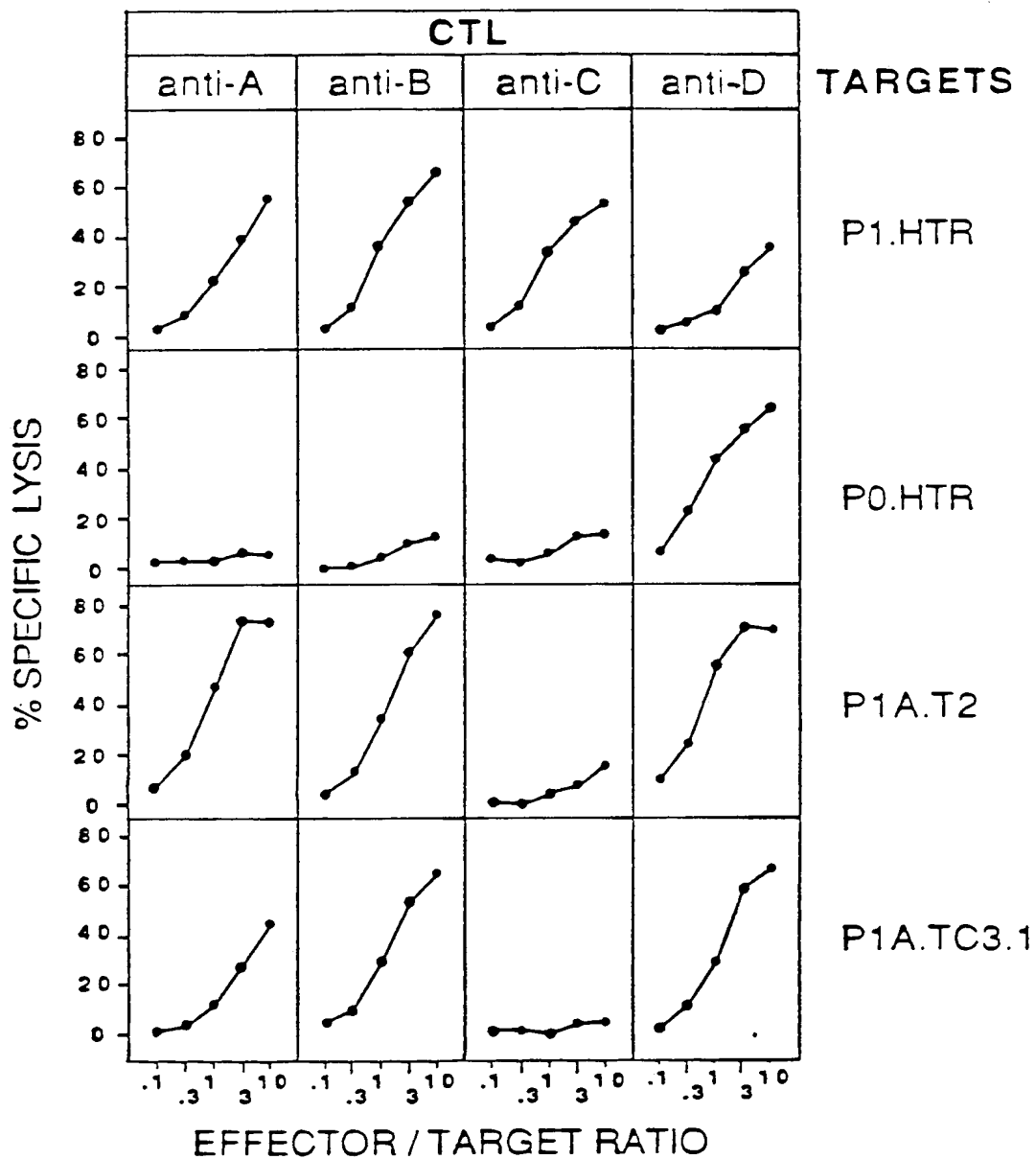
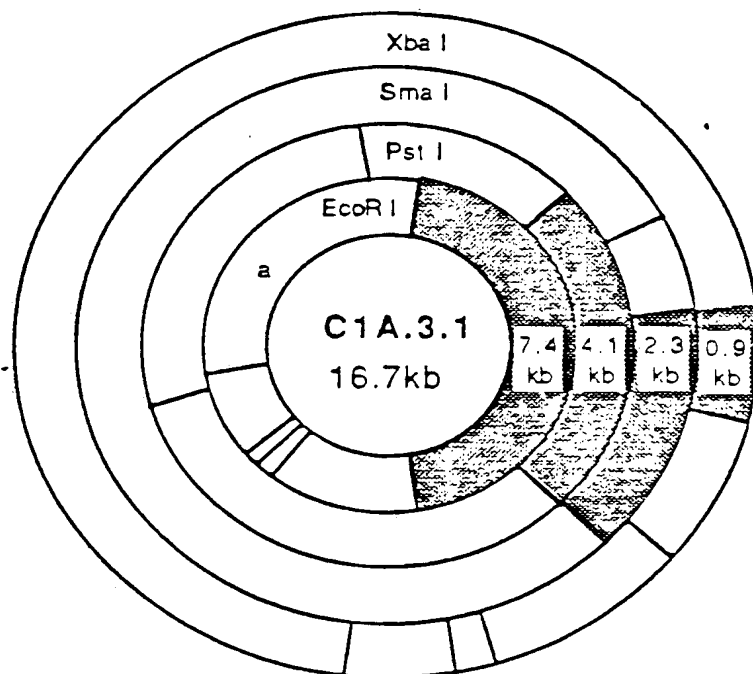


Figure 2



Transfection of restriction fragments

No. of clones expressing P815A
/ no. of HmB^r clones

4.1 kb Pst I - Pst I	2/16
2.3 kb Sma I - Pst I	16/96
0.9 kb Sma I - Xba I	22/96

Figure 3

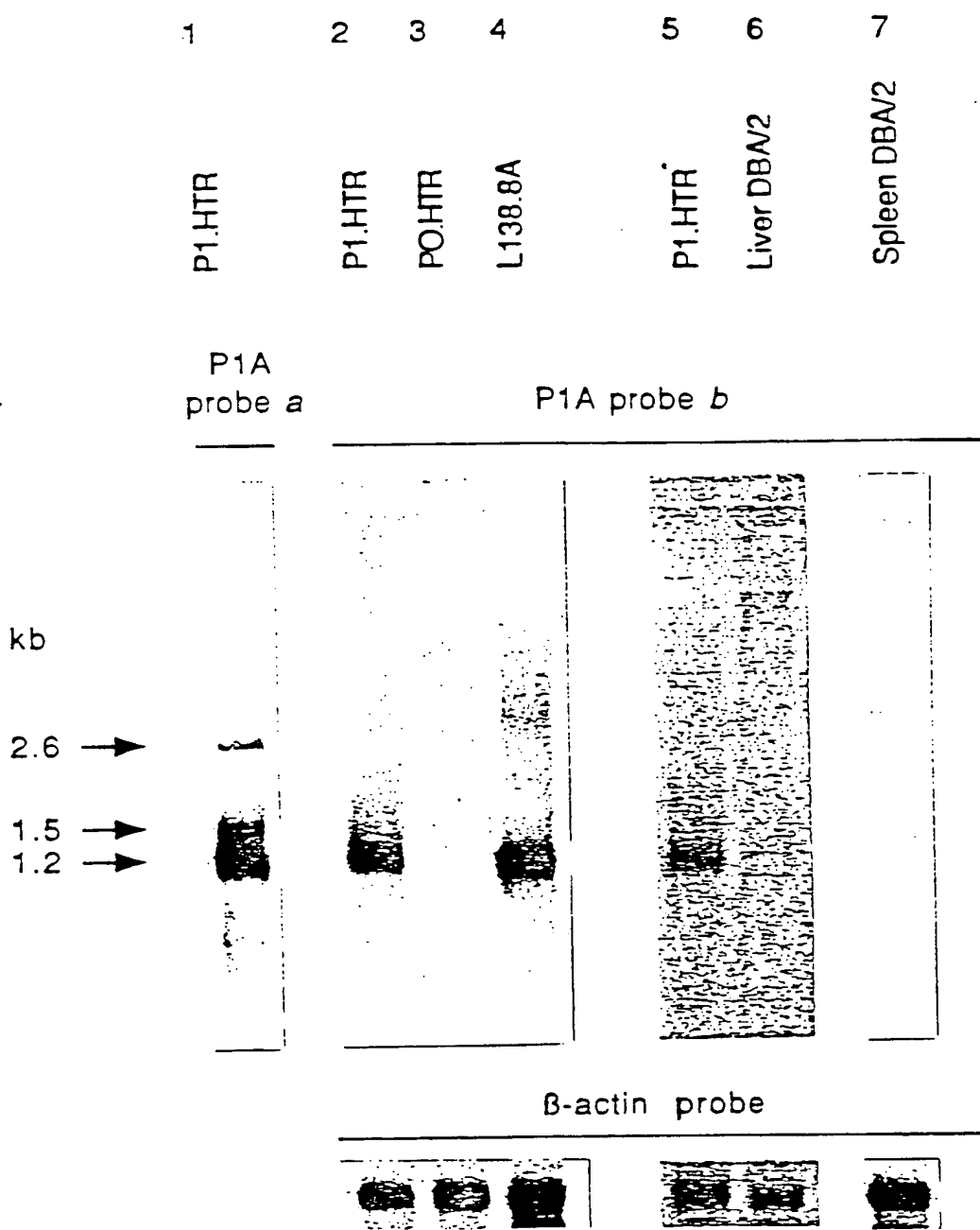


Figure 4

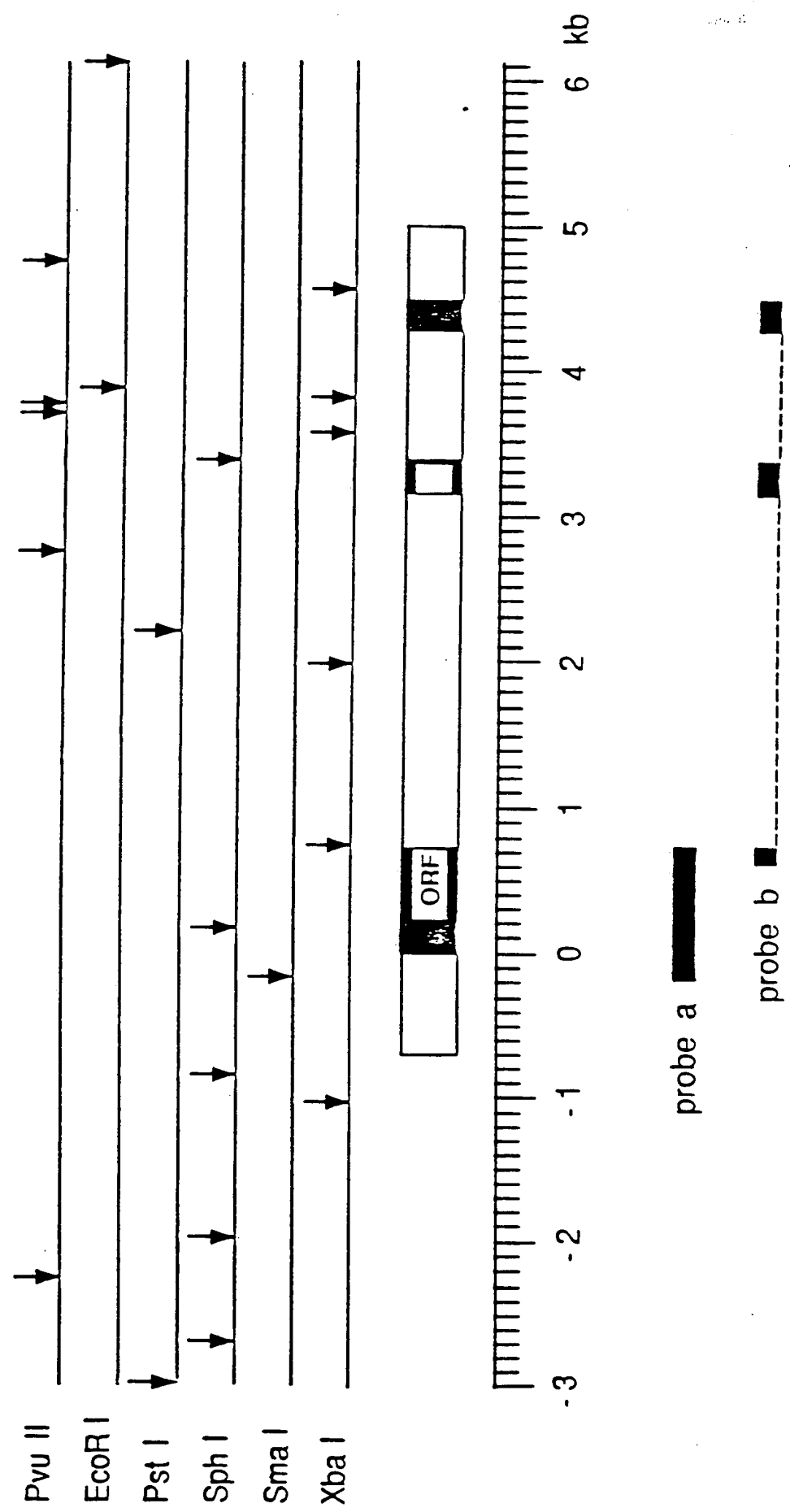


Figure 5

ACCACAGGAG AATGAAAAGA ACCCGGGACT CCCAAAGACG CTAGATGTGT GAAGATCCTG ATCACTCATT	-120
GGGTGTCTGA GTTCTGCGAT ATTCATCCCT CAGCCAATGA GCTTACTGTT CTCGTGGGGG GTTTGTGAGC	-50
CTTGGGTAGG AAGTTTTGCA AGTTCCGCCT ACAGCTCTAG CTTGTGAATT TGTACCCTTT CACGTAAAAA	19
AGTAGTCCAG AGTTTACTAC ACCCTCCCTC CCCCCTCCCA CCTCGTGCTG TGCTGAGTTT AGAAGTCTTC	89
CTTATAGAAG TCTTCCGTAT AGAACTCTTC CGGAGGAAGG AGGGAGGACC CCCCCCTTT GCTCTCCCAG	159
CATGCATTGT GTCAACGCCA TTGCACTGAG CTGGTCGAAG AAGTAAGCCG CTAGCTTGCG ACTCTACTCT	229
TATCTTAACT TAGCTCGGCT TCCTGCTGGT ACCCTTTGTG CC	271

FIGURE 6a

ATG	TCT	GAT	AAC	AAG	AAA	CCA	GAC	AAA	GCC	CAC	AGT	GGC	TCA	GGT	GGT	GAC	GGT	GAT	GGG	59
Met	Ser	Asp	Asn	Lys	Lys	Pro	Asp	Lys	Ala	His	Ser	Gly	Ser	Gly	Gly	Asp	Gly	Asp	Gly	
AAT	AGG	TGC	AAT	TTA	TTG	CAC	CGG	TAC	TCC	CTG	GAA	GAA	ATT	CTG	CCT	TAT	CTA	GGG	TGG	118
Asn	Arg	Cys	Asn	Leu	Leu	His	Arg	Tyr	Ser	Leu	Glu	Glu	Ile	Leu	Pro	Tyr	Leu	Gly	Trp	
CTG	GTC	TTC	GCT	GTT	GTC	ACA	ACA	AGT	TTT	CTG	GCG	CTC	CAG	ATG	TTC	ATA	GAC	GCC	CTT	177
Leu	Val	Phe	Ala	Val	Val	Thr	Thr	Ser	Phe	Leu	Ala	Leu	Gln	Met	Phe	Ile	Asp	Ala	Leu	
TAT	GAG	GAG	CAG	TAT	GAA	AGG	GAT	GTG	GCC	TGG	ATA	GCC	AGG	CAA	AGC	AAG	CGC	ATG	TCC	236
Tyr	Glu	Glu	Gln	Tyr	Glu	Arg	Asp	Val	Ala	Trp	Ile	Ala	Arg	Gln	Ser	Lys	Arg	Met	Ser	
TCT	GTC	GAT	GAG	GAT	GAA	GAC	GAT	GAG	GAT	GAT	GAG	GAT	GAC	TAC	TAC	GAC	GAC	GAG	GAC	295
Ser	Val	Asp	Glu	Asp	Glu	Asp	Asp	Glu	Asp	Asp	Glu	Asp	Asp	Tyr	Tyr	Asp	Asp	Glu	Asp	
GAC	GAC	GAC	GAT	GCC	TTC	TAT	GAT	GAT	GAG	GAT	GAT	GAG	GAA	GAA	GAA	TTG	GAG	AAC	CTG	354
Asp	Asp	Asp	Asp	Ala	Phe	Tyr	Asp	Asp	Glu	Asp	Asp	Glu	Glu	Glu	Glu	Leu	Glu	Asn	Leu	
ATG	GAT	GAT	GAA	TCA	GAA	GAT	GAG	GCC	GAA	GAA	GAG	ATG	AGC	GTG	GAA	ATG	GGT	GCC	GGA	413
Met	Asp	Asp	Glu	Ser	Glu	Asp	Glu	Ala	Glu	Glu	Glu	Met	Ser	Val	Glu	Met	Gly	Ala	Gly	
GCT	GAG	GAA	ATG	GGT	GCT	GGC	GCT	AAC	TGT	GCC	TGT	GTT	CCT	GGC	CAT	CAT	TTA	AGG	AAG	472
Ala	Glu	Glu	Met	Gly	Ala	Gly	Ala	Asn	Cys	Ala	Cys	Val	Pro	Gly	His	His	Leu	Arg	Lys	
AAT	GAA	GTG	AAG	TGT	AGG	ATG	ATT	TAT	TTC	TTC	CAC	GAC	CCT	AAT	TTC	CTG	GTG	TCT	ATA	531
Asn	Glu	Val	Lys	Cys	Arg	Met	Ile	Tyr	Phe	Phe	His	Asp	Pro	Asn	Phe	Leu	Val	Ser	Ile	
CCA	GTG	AAC	CCT	AAG	GAA	CAA	ATG	GAG	TGT	AGG	TGT	GAA	AAT	GCT	GAT	GAA	GAG	GTT	GCA	590
Pro	Val	Asn	Pro	Lys	Glu	Gln	Met	Glu	Cys	Arg	Cys	Glu	Asn	Ala	Asp	Glu	Glu	Val	Ala	
ATG	GAA	GAG	GAA	GAA	GAA	GAG	GAG	GAG	GAG	GAG	GAG	GAA	GAG	GAA	ATG	GGA	AAC	CCG	GAT	649
Met	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Met	Gly	Asn	Pro	Asp	
GGC	TTC	TCA	CCT	TAG																
Gly	Phe	Ser	Pro	Amb																

FIGURE 6b

GCATGCAGTT GCAAAGCCCA GAAGAAAGAA ATGGACAGCG GAAGAAGTGG TTGTTTTTTT 60
TTCCCCTTCA TTAATTTTCT AGTTTTTAGT AATCCAGAAA ATTTGATTTT GTTCTAAAGT 120
TCATTATGCA AAGATGTCAC CAACAGACTT CTGACTGCAT GGTGAACTTT CATATGATAC 180
ATAGGATTAC ACTTGTACCT GTTAAAAATA AAAGTTTGAC TTGCATAC 228

FIGURE 6c

cdNA Sequence of gene P1A
 Content of ASCII file : CDNA (cfr Figure 6, parts a,b,c)

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ACCACAGGAG AATGAAAAGA ACCCGGGACT CCCAAAGAGG CTAGATGTGT
GAAGATCCTG ATCACTCATT GGGTGTCTCA GTTCTGCGAT ATTCACTCCCT
CAGCCAATGA GCTTACTGTT CTCGTGGGGG GTTGTGAGC CTTGGGTAGG
AAGTTTTGCA AGTTCCGCCCT ACAGCTCTAG CTTGTGAATT TGTACCCCTT
CACGTAAAAA AGTAGTCCAG AGTTTACTAC ACCCTCCCTC CCCCCTCCCA
CCTCGTGCTG TGCTGAGTTT AGAAGTCTTC CTTATAGAAG TCTTCGSTAT
ACAACTCTTC CGGAGGAAGS AGGGAGGAUC CCCCCCCTTT GCTCTCCAG
CATGCATTGT GTCAAAGCCA TTGCACTGAG CTGCTCGAAG AAGTAAGCCG
CTAGCTTGCG ACTCTACTCT TATCTTAACT TAGCTCGGCT TCCTGCTGGT
ACCCCTTGTG CC
ATG TCT GAT AAC AAG AAA CCA GAC AAA GCC CAC AGT GGC TCA
GGT GGT GAC GGT GAT GGG AAT AGG TGC AAT TTA TTG CAC CGG
TAC TCC CTG CAA GAA ATT CTG CCT TAT CTA GGG TGG CTG GTC
TTC GCT GTT GTC ACA ACA AGT TTT CTG GCG CTC CAC ATG TTC
ATA GAC GCC CTT TAT GAG GAG CAG TAT GAA AGG GAT GTG GCC
TGG ATA GCC AUG CAA AGC AAG CGC ATG TCC TCT GTC GAT CAG
GAT GAA GAC GAT GAC GAT GAT GAG GAT GAC TAC TAC GAC GAC
GAG GAC GAC GAC GAC GAT GCC TTC TAT GAT GAT GAG CAT GAT
GAG GAA GAA GAA TTG GAG AAC CTG ATG GAT GAT GAA TCA GAA
GAT GAG GCC GAA GAA GAG ATG AGC GTG GAA ATG GGT CCC GGA
GCT GAG GAA ATG GGT GCT GGC GCT AAC TGT GCC TGT GTT CCT
GGC CAT CAT TTA AGG AAG AAT GAA GTG AAG TGT AGG ATG ATT
TAT TTC TTC CAC GAC CCT AAT TTC CTG GTG TCT ATA CCA GTG
AAC CCT AAG GAA CAA ATG GAG TGT AGG TGT GAA AAT GCT CAT
GAA GAG GTT GCA ATG GAA GAG GAA GAA GAA GAG GAG GAG
GAG GAG GAA GAG GAA ATG GGA AAC CCG GAT GGC TTC TCA CCT
TAG
GCATCCAGTT GCAAAACCCA GAAGAAAGAA ATGGACAGCG GAAGAAGTGG
TTGTTTTTTT TTCCCTTTCA TTAATTTTCT AGTTTTTAGT AATCCAGAAA
ATTTGATTTT GTTCTAAAGT TCATTATGCA AAGATGTCAC CAACAGACTT
CTGACTGCAT GGTGAACCTT CATATGATAC ATACCATTAC ACTTGTACCT
GTAAAAATA AAGTTTGAC TTGCATAC

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Figure 6d

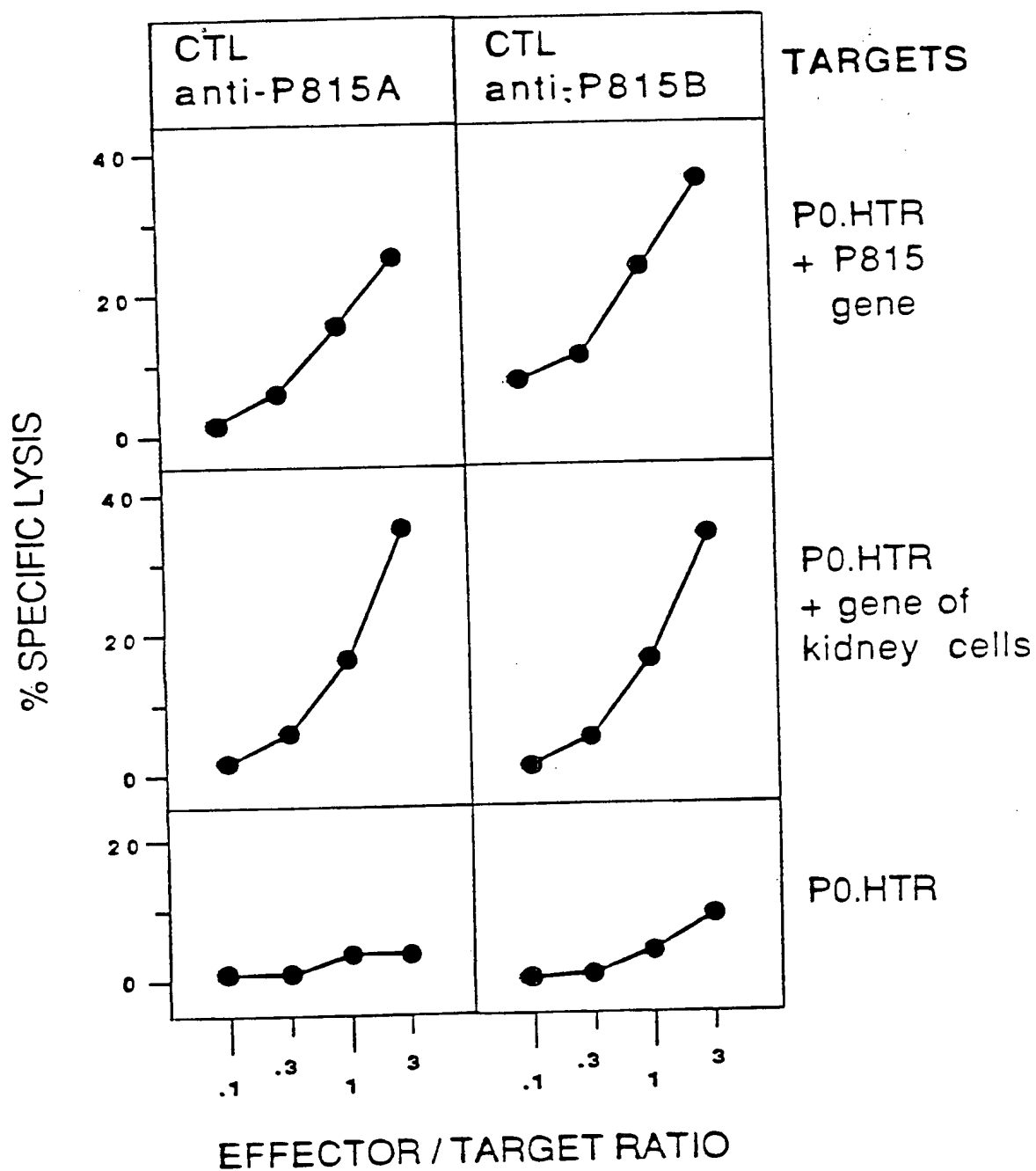


Figure 7

07 728838

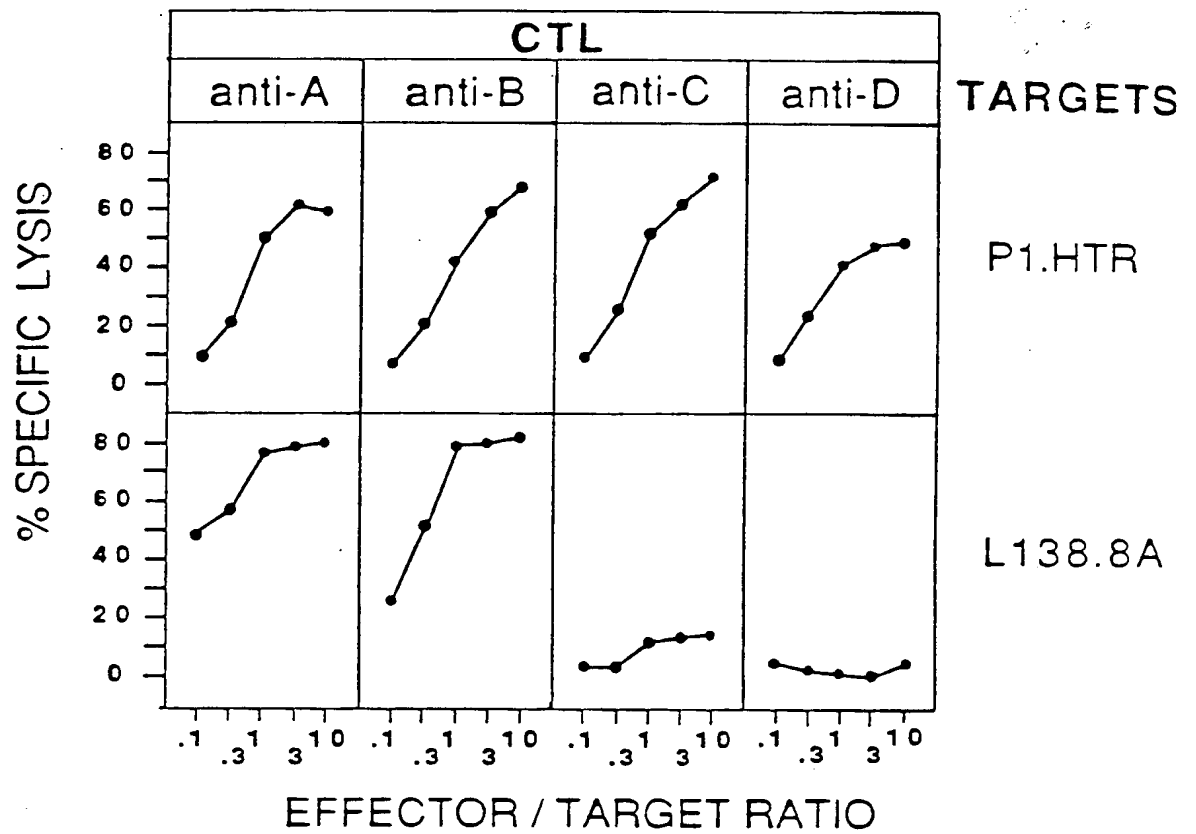


Figure 8

Genomic Sequence of gene P1A
Content of ASCII file : GENOMIC

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CAGCCAATGA GCTTACTGTT CTCGTGGGGG GTTGTGTGAGC CTTGGGTAGG
AAGTTTTGCA AGTTCCGCCT ACAGCTCTAG CTTGTGAATT TGTACCCCTT
CAGGTAAAAA AGTAGTCCAG AGTTTACTAC ACCCTCCCTC CCCCCTCCCA
CCTCGTGCTG TGCTGAGTTT AGAAGTCTTC CTTATAGAAC TCTTCCGTAT
AGAACTCTTC CGGAGGAAGG AGGGAGGACC CCCCCCTTTT GCTCTCCAG
CATGCATTGT GTCAACGCCA TTGCACTGAG CTGGTCCGAC AAGTAAAGCG
CTAGCTTGCG ACTCTACTCT TATCTTAACT TAGCTGGGCT TCCTGCTGGT
ACCCCTTTGTG CC
ATG TCT GAT AAC AAG AAA CCA GAC AAA GCC CAG AGT GGC TCA
CGT GGT GAC GGT GAT GGG AAT AGG TGC AAT TTA TTG CAC CGG
TAC TCC CTG GAA GAA ATT CTG CCT TAT CTA GGG TGG CTG GTC
TTC GCT GTT GTC ACA ACA AGT TTT CTG GCG CTC CAG ATG TTC
ATA GAC GCC CTT TAT GAG GAG CAG TAT GAA AGG GAT GTG GCC
TGG ATA GCC AGG CAA AGC AAG CGC ATG TCC TCT GTC GAT GAC
GAT GAA GAC GAT GAG GAT GAT GAG GAT GAC TAC TAC GAC GAC
GAG CAC GAC GAC GAC GAT GGC TTC TAT GAT GAT GAG GAT GAT
GAG GAA GAA GAA TTG CAG AAC CTG ATG GAT GAT GAA TCA GAA
GAT GAG GCC GAA GAA GAG ATG AGC GTG GAA ATG GGT GCC GCA
GCT GAG GAA ATG GGT GCT GGC GCT AAC TGT GCC T
GTGAGTAACC CGTGGTCTTT ACTCTAGATT CAGGTGGGGT GCATTCTTTA
CTCTTGCCCA CATCTGTAGT AAAGACCACA TTTTGGTTGG GGGTCATTGC
TGGAGCCATT CCGGCTCTC CIGTCCAGGC CTATCCCCGC TCCTCCCATC
CCCCACTCCT TGCTCCGCTC TCTTTCTTTT TCCCACCTTG CCTCTGGAGC
TTCAGTCCAT CCGCTCTGC TCCCTTTCCC CTTTGCTCTC CTTGCTCCCC
TCCCCCTCGG CTCAACTTTT CCGTCCCTCT GCTCTCTGAT CCCCACCTC
TTCAGGCTTC CCGATTGCT CCTCTCCCGA AACCTCCCC TTCTGTTC
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TCACCAGCTT TGCTCTCCCT GCTCCCCCTC CCGTTTTGCA CCTTTCTTTT
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CTACCTGCTT CCGTCCCCCT TGCTCTCCC TCCCTATTG CATTTTCGGG
TGCTCTCTCC TCCCCCTCCC CCTCCCTCCC TATTTGCATT TTCGGGTGCT
CCTCCCTCCC CCTCCCCAGG CTTTTTTTTT TTTTTTTTTT TTTTTTTTTT
TTGGTTTTTC GAGACAGGGT TTCTCTTTGT ATCCCTGGCT GTCCCTGGAC
TCACTCTGTA GACCAGGCTG GCCTCAAACT CAGAAATCTG CCGTCCCTG
CCTCCCAAT GCTGGGATTA AAGGCTTGCA CCAGGACTGC CCCAGTGCAG
GCCTTTCTTT TTTCTCTCT CTGGTCTCCC TAATCCCTTT TCTGCATGTT
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TCTGCTTTT CTGTCCCTGC TCCCTCTCT GCTAACCTTT TAATGCTTTT
CTTTCTAGA CTCCCCCTC CAGGCTTGCT GTTGTCTCT GTGCACTTTT
CCTGACCTG CTCCCCCTC CCGCTCCAGT CCGCTCTCT TTCTCCCAT
CCTTTCTCCA GCGTGTACC CCTCTCTCT ACTCTCTCT CTGCTGCTG
TCTGCTTCC TTTACCTCT CCGTCTCCCT ACTCTCTCT CTGCTGCTG
GACTTCCTCT CCAGCCGCCC AGTTCCCTGC AGTCCCTGGG TCTTCTCTG
CTCTCTGTCC ATCACTTCCC CCTAGTTTCA CTTCCCTTTC ACTCTCTCT
ATGTGTCTCT CTCTCTATCT ATCCCTTCT TTCTGTCCCC TCTCTCTGT
CCATCACCTC TCTCTCTCT TCCCTTCTCT CTCTCTTCCA TTTCTTCCA
CCTGCTTCTT TACCTTGGCT CTCCCATTCG CCTCTTACCT TTATGCCCAT
TCCATGTCCC CTCTCAATTC CCGTCTCCAT TCTGCTCCCT CACATCTTCC

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Figure 9

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ATTTCCTCTT TTCTCCCTTA GCCTCTTCTT CCTCTTCTCT TGTATCTCCC
TTCCCTTTGC TTCTCCCTCC TCCTTTCCCC TTCCCTCTATG CCCTCTACTC
TACTTGATCT TCTCTCTCTT CCACATACCC TTTTTCCTTT CCACCTCTCC
CTTTGTCCCC AGACCTTACA GTATCCTGTG CACAGGAAGT GGGAGGTGCC
ATCAACAACA AGGAGGCAAG AAACAGAGCA AAATCCCAAA ATCAGCAGGA
AAGGCTGGAT GAAAATAAGG CCAGGTTCTG AGGACAGCTG GAATCTAGCC
AAGTGGCTCC TATAACCTTA AGTACCAAGG GAGAAAGTGA TGGTGAAGTT
CTTGATCCTT GCTGCTTCTT TTACATATGT TGGCACATCT TTCTCAAATG
CAGGCCATGC TCCATGCTTG GCGCTTGCTC AGCGTGGTTA AGTAATGGGA
GAATCTGAAA ACTAGGGGCC AGTGGTTTGT TTTGGGGACA AATTAGCAGG
TAGTGATATT TCCCCCTAAA AATTATAACA AACAGATTCA TGATTTGAGA
TCCTTCTACA GGTGAGAAGT GGAATAATG TCATTATGAA GTTCTTTTA
GGCTAAAGAT ACTTGGAAAC ATAGAAGCGT TGTAAAAATA CTGCTTTCTT
TTGCTAAAAAT ATTCTTTCTC ACATATTCTT ATTCTCCAG
GT GTT CCT GGC CAT CAT TTA AGG AAG AAT GAA GTG AAG TGT
AGG ATG ATT TAT TTC TTC CAC GAC CCT AAT TTC CTG GTG TCT
ATA CCA GTG AAC CCT AAG GAA CAA ATG GAG TGT AGG TGT GAA
AAT GCT GAT GAA GAG GTT GCA ATG GAA CAG GAA GAA GAA GAA
GAG GAG GAG GAG GAG GAA GAG GAA ATG GGA AAC CCG GAT GGC
TTC TCA CCT TAG
GCATGCAGGT ACTGGCTTCA CTACCAACC ATTCTAACA TATGCCGTGA
GCTAAGAGCA TCTTTTTAAA AAATATTATT GGTAACATA ACAATTGTTA
TCTTTTACA TTAATAAGTA TTAATTAAT CCAGTATACA GTTTTAAGAA
CCCTAAGTTA AACAGAAGTC AATGATGTCT AGATGCCTCT TCTTTAGATT
GTAGTGACAC TACTTACTAC AGATGAGAAG TTGTTAGACT CGGGAGTAGA
GACCAGTAAA AGATCATGCA GTGAAATGTG GCCATGGAAA TCCCATATTG
TTCTTATAGT ACCTTTGAGA CAGCTGATAA CAGCTGACAA AAATAAGTGT
TTCAAGAAAG ATCACACGCC ATGGTTTACA TGCAAAATTAT TATTTTCTCG
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TTTTGTTCTA AAGTTTATTA TGCAAAGATG TCACCAACAG ACTTCTGACT
GCATGGTGAA CTTTCATATG ATACATAGGA TTACACTTGT ACCGTGTTAA
AATAAAAGTT TGACTTGCAT AC

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Figure 9 (ctd)

Leu-Leu-His-Arg-Tyr-Ser-Leu-Glu-Glu-Ile-Leu-Pro-Tyr-Leu-Gly-Trp-
Val-Phe-Ala-Val-Val-Thr-Thr-Ser-Phe

Figure 10